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MEDICAL DISSERTATIONS,

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CONTENTS.

- I. Dissertation on Medical Education, and on the Medical Profession. By John G. Coffin, M. D. Fellow of the Massachusetts Medical Society. - - - 1

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MEDICAL DISSERTATIONS.

ARTICLE I.

A

DISSERTATION

ON

Medical Education,

AND

ON THE MEDICAL PROFESSION.

BY JOHN G. COFFIN, M. D.

Fellow of the Massachusetts Medical Society.

Read at the annual meeting, June 5, 1822.

GENTLEMEN,

IN conformity to the duty assigned me, I now proceed to submit to your consideration some remarks on Medical Education, and on the Medical Profession.

The existence of physicians, nominal or real, at all periods of time, and in every condition of society, where men have felt their natural wants, and attempted to supply them, I receive as sufficient evidence that the profession of medicine is founded in the necessities of mankind.

Since then we must have, what we cannot live without, it is well to make good, what is already indispensable.

Having the alleviation of one of our chief wants in view, the art of medicine is, even at the present moment, of the most direct and extensive utility, and may every day become more and more so. And if, in all ages of the world, we have seen this utility called in question by men of sense and discernment, we must ascribe this solely to the errors of its language, the vagueness of its theories, and the unphilosophical character of the great majority of its books and plans of instruction.

The business of promoting and securing health, merits the most serious attention, not only of physicians, but of legislators and the people ; and the place assigned it in every plan of national education should be worthy of the value of its objects. In this important work enough has already been accomplished, to encourage the friends of medical science to continue their efforts for its further advancement. Medicine has undergone many essential improvements, its general character has assumed a more philosophical and practical cast.

Physicians are returning to those forsaken fountains of knowledge, from which Hippocrates and Sydenham drew so largely. They seem to

be aware that our science cannot be benefited by closet speculations, but that experience and observation, under the control of a rigorous logic, are the only genuine sources of useful knowledge.

It is incumbent on those who cultivate medicine, to keep pace with the general progression of human attainments.

Individuals owe this not less to themselves than to the public ; for such is the prevalent competition for medical distinction, so numerous are the competitors, and so ardent the race, that without considerable acquirements and persevering industry, no one can justly rely on winning the prize.

The public too, expect much of physicians, and with reason ; knowing, as they do, the superior advantages of the present day. The legislators of Massachusetts especially, men who have done so much for the advancement of medical knowledge, deserve, in the first place, our acknowledgments, and in the second, all the benefits of an improvement of our art correspondent to the patronage and support which they have given it.

A physician's education may be divided into two parts, preparatory and medical.

The value of the preparatory studies and acquirements of the physician have never been

duly estimated nor sufficiently attended to in this country ; and I presume the remark is applicable to every other.

Before a young man is permitted to enter on the study of medicine, he should possess a knowledge of languages, writing, the science of numbers, geography, natural history, and natural philosophy.

These are essential, and to these should be added, when circumstances will permit, history, government, poetry, drawing, and any and every branch of polite literature.

This information will enlarge the physician's intercourse with society, and open to him many new and extensive sources of knowledge. The most important language to the physician is that of the country in which he is to live and do business : and yet from the style in which many of our body write and speak, I should doubt whether this obvious idea had ever been generally adopted, or much regarded.

An accurate acquaintance with his native language should be considered, as it is, indispensable to an American physician.

Without this he can neither speak, write, nor read, with propriety ; he cannot take a step without betraying the fact that he is not educated. Besides, we all know how much a faulty and inaccurate use of words has retarded the

progress of our art, by raising doubts and disputes, and thus keeping the truth out of sight.

No author will be long read who leaves his reader, half the time, doubtful of his meaning, or uncertain whether he has any at all.

I have lately seen a letter from a physician of New England, who says that though fees are low in his vicinity, his charges for some time past have amounted to fifty dollars a week; that his business consists chiefly in consulting in difficult cases, with the physicians of the neighbouring towns; and that he has restored to health, within four months, in fifteen towns, more than fifty patients, who had been given up to die by the practitioners who had previously attended them.

This fortunate son of Apollo may have somewhat magnified his cures, though I have no reason to doubt his regard for what he conceives to be truth.

He is certainly in good fashion and extensive practice at present, and yet in his communications he is constantly violating every rule of syntax and orthography, and mistaking the common import of common words. This man may die rich, if he should not survive his present currency, but can never be respected while he lives by his more enlightened brethren, nor leave

behind him any thing for the admiration of posterity.*

The Latin should be regarded as essential to the profession : every physician should be able to translate a Latin author with accuracy and ease. I have many times felt the awkward and embarrassed situation in which every physician is liable to be placed who does not possess a good knowledge of this language, and I mention the fact for the advantage and relief of those students and junior practitioners who may yet have an opportunity of supplying this deficiency wherever it exists. With respect to the Greek, physicians should be able to read it, and to understand the

* Since this discourse was read, several persons have inconsiderately asked, Who is this ? as if the question could be answered.

I have quoted an instance to illustrate a case and support an argument ; but nothing has been further from my motive, than a disposition to wound the feelings of an individual, who, for aught I know, is as much, or more, unfortunate than blameable. If ever the man alluded to should read this, I doubt not that he will do me justice, for I presume he will agree with me, that nothing is so valuable as truth to those who are disposed, and sufficiently honest and magnanimous, to make the right use of it. Every one who estimates truth as highly as it deserves to be estimated, will be inclined to make not only some, but many sacrifices of ignorance, prejudice, pride, and indolence, in favour of its promotion.

precise meaning of every word from which any medical term is derived.

Little more than this has been realized or can be expected from this noble tongue, till it shall be regarded and studied as a living language.—An acquaintance with the existing language of the Greeks is the best introduction to a knowledge of their ancient authors.

Not more than two in a hundred of all those who have taken the degree of master of arts in our republic, have ever acquired or retained enough of Greek to render it either pleasant or useful. It must be an error in education, to spend much time and labour to acquire a knowledge of what is useless when known, and no less a defect to learn imperfectly what should be thoroughly understood.

When our instructors in this language shall be learned Greeks, acquainted both with our language and their own, then the Greek may indeed become a language at once entertaining in the acquirement, and profitable in possession.

Science may indeed be translated, but taste and talent cannot. The spirit of original composition is too volatile to be transfused; to catch it we must ascend to the fountain head. The study of languages, beside other good effects, is one of the best exercises in forming a habit of

close and diligent application, which is the first and greatest lesson of life.

When an acquaintance with the French, German, or Italian language, or all of them, can be added to a knowledge of those already mentioned, they will add much to the resources, enjoyments, and success of their possessor. He who learns a foreign language, rich in literary productions, is surprised to find a new world opening to his view. He seems to have been previously shut up within a narrow circle of ideas, when suddenly the dominion of his mind begins to enlarge almost beyond limit.

He finds himself delighted in partaking of treasures of whose very existence he was previously ignorant.

* The writing of a fair and legible hand is a material part of a physician's preliminary education. The advantages of it have not been sufficiently appreciated ; but the inconveniences of writing a bad hand are more obvious, and extend their influence into the business of society. Dr. FULLER, in pathetic terms, laments that he lost all the notes on diseases which he had committed to paper, by writing them in so small a hand, that he was unable to read them when he grew old.

* Dr. RUSH, Introductory Lectures.

Dr. HALLER makes an apology for having misspelled the names of many of the authors whose works he had abridged, by declaring that his hand writing was so much impaired by age, that neither he, nor his amanuensis was able to read, three months afterward, what he had written. I make no allowance, says Dr. RUSH, for the supposed influence of age on the muscles of the doctor's fingers, for I have constantly observed, that a fair legible hand, when acquired early in life, is rarely impaired by age, seldom even by those slight degrees of tremor which sometimes affect the hand in the decline of life.

When in France, Dr. FRANKLIN lamented that he received many letters, containing numerous important inquiries relative to the state of America, from persons disposed to emigrate to our country, which he was unable to answer, because he could not decipher the names which were subscribed to them.

But the writing of a bad hand, which is an inconvenience only in some of the pursuits of men, is often a serious evil in the profession of medicine.

A patient, in the city of London, was killed by an apothecary, who mistook a prescription of *nitrum antimoniale*, for *vitrum antimonii*; and I have heard of *aqua fortis* being added to a julep, instead of *aqua fontana* or common water, in

consequence of the two prescriptions having been written in abbreviated Latin by a careless hand.

Considering how often we are obliged to convey our advice to patients by letters, and how many medicines we prescribe in words not in common use ; considering likewise how injurious a mistake, in a single word or letter, or even the neglect of our prescriptions, from an inability to read them, may be, in its consequences, to the health or life of a patient ;—the writing of a fair and legible hand should be regarded as part, not only of the learning, but also of the morality of a physician.

The most material part of geography to the physician, is that which includes the history of climates, weather, soils, and the local relations of different countries and places to rivers, seas, lakes, bogs, and mountains.

While he is receiving lessons on the physical history of the globe, he should read such books of travels as contain accounts of the food, medicines, dresses, employments, manners, amusements, and religions of different nations : all of which will be found to be intimately connected with the causes and cure of diseases.

When the medical topography of the different districts and towns in various countries shall be known, the physician will know better than he now does, where to send such of his patients

as need travelling, and a better atmosphere and residence for their restoration. When this very desirable information shall be diffused throughout our own various and immense regions, our friends of the south, sick or well, will be the better enabled to select a suitable summer residence in the north, and the contrary. As our art is founded in a knowledge of nature, the more the physician knows of natural history and natural philosophy, the better will he be able to prevent and to cure diseases.

Every physician should understand arithmetic, and enough of the plainer and more practical parts of the mathematics to enable him to follow the calculations and demonstrations of a lecturer or an author, and to transact the common business of life.

In selecting a son for the medical profession, he only should be taken who has a firm body, and a good understanding; the latter is necessary to enable him to acquire a knowledge of his art, and the former, to render him useful in its application.

To give any child the best constitution of which he is naturally susceptible, the primary object of his parents, for the first ten years of his life, should be his physical education. I do not mean that his mind is to be neglected during this period, but that his intellectual powers are

to be so cultivated, as not to interfere with the more important concern of exercising, unfolding, and perfecting the corporeal system.

A vast deal of information, however, and of precious information too, may be obtained while we are thus laying the foundation of good health and spirits for the remainder of life. I allude to a knowledge of ourselves, of our personal energies and resources, and of the properties of the material world which surrounds us, and in which we are to live.

To these acquirements may be added the rudiments of literature, provided the first lessons are short and easy; rather amusements than appalling and paralyzing labour and restriction. To those parents who have thought only of the minds of their children, this management may seem too great a sacrifice of the nobler endowments of intellect, to the inferior mechanism of the body. The reply to this is, that no young person of any age, can devote all his hours to study; every day affords sufficient time for all the purposes of physical, intellectual, and moral discipline and instruction, and that these essential branches of a perfect system of education, are so intimately connected, that no one or two of them can be successfully conducted without the other.

And I apprehend that our higher seminaries of learning *will never deserve nor possess the confi-*

dence of the public, or be able to secure the literary and moral reputation of the individuals intrusted to their care, till these material departments of a good and safe education shall be distinctly perceived, admitted, and provided for.

Such are the relations and reciprocal influence of the various human arts and sciences, that no one of them can be well cultivated alone; they must all, in some good degree, advance or decline together. Medicine, for example, will always be affected favourably or otherwise by the prevailing systems of general education, hence my apology, if any be required, for noticing a subject, which at first view, might seem foreign from the purposes of this discourse. We have at present but few schools which might not be improved in the selection of things to be taught, and in the mode and order of teaching them.

When the selection shall be good, no time will be lost on what is superfluous, and this will leave time enough to learn well what is worth learning at all; and when the mode of conveying knowledge to the human mind shall be perfected, much time and labour will be saved by this improvement; and when the order of the pupil's studies is the best, those subjects will immediately succeed each other which are most nearly related, so that what precedes, shall lead to, explain and facilitate what follows.

When schools shall be thus organized and conducted, they will give the learner precisely what he wants and no more, and this in the shortest time and best manner.

But thus to accommodate individuals, it is obvious that there must be schools of different character and objects, or that particular persons must take parts only of any entire system of instruction. "A classical education is a fine preparation for acting in society with complacency, propriety, and dignity; for sound learning and correct taste are nearly connected with pure morals. Independently of all principle, they give a delicacy and sensibility to the mind, very favourable to virtue; and while they are, in themselves, a prominent source of happiness to the individual, and place him above the necessity of seeking it from sources less pure, they, at the same time, become the means of diffusing happiness around him."*

A wise and able magistrate, a learned professor of the law, a humane and benevolent physician, no less than an enlightened teacher of religion, contribute to the happiness of posterity, as well as to that of the age in which they live. By their knowledge, they mitigate the evils of their cotemporaries; by their example, they mend the characters of those with whom they associate;

* Dr. Bard.

and, by their precepts, they sow the seeds of excellence which may bless and exalt their country to future generations.

Before we enter on a consideration of the proper mode of studying medicine, it is well to premise that this is a comprehensive and an intricate science, founded on numberless facts which have been discovered through the successive periods of distant ages, and which have been collected and preserved in the writings of almost innumerable authors, of different nations and tongues.

It has necessarily been coloured and disfigured by the credulity of some; rejected, lost, and again revived, by the cautious discrimination of others; elucidated by new discoveries, and confirmed by later experience.

Among ignorant and barbarous nations, this science has ever been connected with religion, involved in mystery, and disfigured by superstition. By these errors the progress of medical science, though not absolutely arrested, was greatly checked; till through the important discovery of the circulation of the blood by Harvey, and the introduction of a strict philosophy by Bacon, in which opinion was made to give place to observation, and a patient investigation of facts was substituted for the quibbles of sophistry, the science of medicine became again placed on its proper basis—nature, observation, and experience.

From this moment, anatomy, chemistry, natural history, and natural philosophy, which, though they had long been in the train of medicine, had rather followed than directed her researches, were impressed into her service, and made to take the lead in a medical education: nor till he has made considerable progress in these, can the student in medicine be properly qualified even to begin what is the great object of his pursuit—the study of diseases, and their cure.

Supposing a young gentleman to be duly prepared to enter on the study of medicine, we may now inquire, how this pursuit can best be prosecuted.

On this subject I could not better, nor so well, express my own views and impressions as to adopt the sentiments of the late excellent Dr. Bard, of New York, as conveyed in his own pure and beautiful language. “In a profession so various, so intricate, and so extensive, it is easy to see that the scholar can make but little progress by private study. Lost and bewildered in the multiplicity of objects, and in the contrariety of conflicting opinions, he absolutely requires the hand of a master to lead him into the plainest and most direct path; to remove, as he goes along, the obstacles which may obstruct his progress, and to point out such objects as are most worthy of his observation.

“Nor are there many individuals who are qualified to teach all the preliminary branches ; each of them is sufficiently extensive to employ the time, and occupy the attention of a man of no common attainments. Besides, chemistry requires a laboratory ; botany, a garden ; and anatomy, a theatre and subjects ; and, above all, the nature of diseases and the practice of medicine, cannot be taught but in a public hospital.

“Much, therefore, as oral instruction, and the voice of a professor are to be preferred to the silent investigations of the closet, still more is required. The cooperation of several teachers, and the facilities of a public institution, and that too in a large city, where only, in this country at least, anatomy and the practice of medicine can be properly taught. In both these branches, the student must not only receive the instructions of his teacher ; must not only reflect on and digest what he hears and reads ; but he must see, and handle, and examine for himself.

“In anatomy, the subject properly prepared, must be placed before him ; without this, the most accurate description, even when aided by the finest plates and drawings, will be found wholly inadequate to convey correct ideas, or to make durable impressions on his mind.

“The parts must be unfolded by the knife ; they must be distended by injections ; and what-

ever is uninteresting and obscures their intimate structure, must be removed ; or the student will look with a vacant eye on what to him will appear an unformed mass : and if possible, after having been taught what to look for, and what is most worthy his observation, he should handle the knife and syringe for himself. He should learn how to prepare the subject for the instruction of others.

“ In chemistry, the science of nature, by which we are admitted into her confidence, are taught her secrets, and learn her processes ; but slow progress can be made without a teacher, aided too, by a large and expensive apparatus.

“ For though by the introduction of a more correct language, and a more liberal philosophy, all the jargon and mystery by which the old chemists clothed their communications, and concealed their art, have been done away ; still the multiplicity of facts, the delicacy of processes, and the variety of apparatus, are such, that practice only can give that dexterity which is necessary to insure success ; and to acquire this dexterity, unassisted, would require more time, and be accompanied by greater expense, than most students of medicine could well afford.

“ In botany and natural history, the number of objects to be examined, and with which it is necessary to become acquainted, is so great, that

without a garden and museum, without arrangement and system, no correct or valuable knowledge can be acquired.

“And, lastly, in the study of diseases, and in the practice of medicine, no histories, however accurate, no reasoning, however just, can convey the knowledge necessary for their treatment and cure.

“The student must hear, and see, and feel for himself. The hue of the complexion, the feel of the skin, the lustre or langour of the eye, the throbbing of the pulse and the palpitations of the heart, the quickness and ease of respiration, and the tone and tremor of the voice, the confidence of hope, and the despondence of fear, as they are expressed in the countenance, baffle all description; and yet all and each of these convey important and necessary information.

“Where can these be learnt but at the bedside of the sick? and where can a young man, who cannot be admitted into the privacies of families, or the chambers of women, acquire this necessary information, but in a public hospital, which is intended not only as an asylum to relieve the complicated misery of poverty and sickness, but as a school of medicine, to contribute to the public welfare; and as such, deserves and receives the patronage of government, even more than as a mere charitable institution.

“But beside these considerations, and the impossibility of teaching medicine in private, there are many advantages which attend public institutions in this, as well as in most other sciences: one is, that from a division of the subject, a more enlarged, comprehensive, and systematic view of the whole will be taken; its connexion with, and dependence on, other branches of learning, will be more clearly pointed out; and general laws and fundamental principles will be better taught.

“The student learns what are the proper objects of his inquiry at each stage, and as he goes along, is instructed how to make a proper use of his previous acquirements and experience.

“Besides, young men, engaged in the same studies, mutually assist each other. Emulation, which warms and engages the passions on the side of whatever is excellent, cannot be excited without rivals. Without emulation in the scholar, instruction will proceed but with a languid pace, and excellence is never attained. Nor is emulation confined to the scholar. The emoluments of the teacher depend on his fame, and both on his talents and industry.

“Stimulated, therefore, by his interest, and spurred on by his ambition, he will make every exertion to recommend his lectures, which he knows are to be brought to the ordeal of a nice and critical examination. Among his hearers there

will always be a number of the elder students, very able to judge of his merits, and very willing to discover his errors. Such a system of education cannot long be conducted in a slovenly or incompetent manner; negligence will sit very uneasily, and incompetence cannot long keep her seat in a professor's chair.

“Nor is it by exciting their emulation only, that young men, assembled in a public school, are of use to each other; they mutually instruct one another by their daily conversation, and in societies formed for the purpose of discussing professional opinions, on which they often exercise a degree of attention and acuteness which serves as no inadequate test of their truth and usefulness; and this further serves to explain them to their understandings, and to fix them in their memories, with more clearness and precision than hearing them many times repeated from their professors.

“Indolence is the greatest enemy to learning, but indolence is a vice bred and nourished in solitude, and can hardly exist at a public school, but in minds of so heavy a mould as to be incapable of culture.

“But dissipation is the error into which a young man of lively disposition and quick parts, especially on first coming from the retirement of the country into a large and luxurious city, is most

apt to fall; and unless he possesses some strength of mind, the variety of new scenes, the novelty of surrounding objects, and the allurements of pleasure, too frequently seize on his imagination, occupy his thoughts, waste his time and resources, blast his own prospects, and disappoint the hopes and expectations of his friends. Against this, I have nothing to urge but the common, though strong and irresistible argument, of duty and necessity; nor any remedy to propose, but that of wholesome employment.

“It is the commencement of his career which the student will find to be the most dangerous; if he postpones his indulgence for a short time, even for a few weeks, till he is fairly engaged in his studies, full occupation will at least lessen the temptation; and when once he sees how absolutely incompatible dissipation and pleasure are with duty and improvement, he will probably find himself able to resist their attractions, or, I should rather hope, they will have no attractions for him. On the other hand, to continue in retirement, and there to labour without plan or design, may indeed accumulate a confused mass of materials; but beauty, order, and proportion, are the result of skill;—he who would build a palace must employ an architect.

“So the student of medicine who trusts to his own unassisted researches, or is directed by an in-

adequate guide, may load his memory and confound his judgment, by a great number of facts, and a medley of opinions, which will only lead him into error, and end at last in darkness and confusion.

“But he who is properly initiated into the rudiments of his art, pursues his improvement in the light of day; every step he takes brings him nearer to his proposed end; every fact and opinion he learns, takes its proper place; and knowledge, clear, precise, and accurate knowledge, is the happy result.”*

Various medical schools differ in the number of their professors, the variety and extent of their lectures, and in other particulars, so that some one must be preferable to others. The misfortune of ours is, that they are too numerous, so that no one obtains but a portion of that patronage and support which numbers and wealth only can give, but which are necessary to enable any one seminary to furnish all the means of instruction. A French physician and writer of eminence, wishing to perfect the existing plan of medical education in his country, has recently proposed that there be in Paris but one school for the teaching of medicine.

* See a Discourse on Medical Education, by Samuel Bard, M. D. &c. &c. New York, 1819.

That this institution shall have twenty professors, and that these should give annually eighteen courses of lectures on the following subjects ;

1st course. Descriptive anatomy and general pathology.

2d. Physiology. 3d. External nosography.

4th and 5th. Internal nosography, and hygiène.

6th. General semeiology.

7th. General therapeutics.

8th. Surgical operations, bandages and apparatus, and attendance on lying-in women.

9th. Materia medica.

10th and 11th. Clinical surgery.

12th and 13th. Clinical medicine.

14th. Legal medicine, and the history of medicine.

15th. Medical chemistry and physics.

16th. Pharmacy. 17th. Natural history.

18th. Medical methodology and bibliography.

After studying three years, attending these lectures, and sustaining three examinations, in the French or Latin language, to the acceptance of his teachers, the pupil becomes a candidate for the degree of bachelor of medicine.

After the fourth year passed in the same way, and two more examinations, he may obtain the degree of doctor of medicine. And after devoting his fifth year to a revision and correction of all his studies, and improving himself by attending

on the practice of the best hospitals, he is permitted to set up the practice of his profession.

All the phenomena of nature in the inorganic, the vegetable, and animal kingdoms; all the capacities and agency of men, are united by an unbroken chain, which forms of these one universal system—an encyclopedical whole; there is then but one science vast as nature itself.

But our minds are limited, and science is immense, and man has been obliged, in order to bring this within his feeble intelligence, to consider in their relations those phenomena and operations which have between them the closest connexion; and he has accordingly established particular doctrines or sciences which are separated by limits purely conventional.

But though the divisions of the sciences are artificial, the order in which they should be studied is not arbitrary. The success of our labours and researches will, in a great measure, depend on the choice of a good method; and that is the best which is at once the most convenient to follow, and the best suited to fix in the memory the facts we purpose to retain there.

The student left to himself has not the discernment necessary to enable him to decide from what point he should start, or in what direction he should steer his course. At first he is disposed to try every thing, that he may know what

is best, and is liable to lose much time in a painful and unprofitable fluctuation. He enters, for instance, a medical library, and sees a multitude of books, which would cost him twenty years to read. The impossibility of doing this, with other requirements, may discourage him, and lead him to abandon a course which, if rightly pursued, might prove satisfactory and successful.

In several German universities, a chair has been wisely instituted for lectures on medical methodology and bibliography, for the purpose of conducting pupils through an extended labyrinth of means and objects.

In regard to books, the professor does not content himself by giving merely the titles, dates, and best editions of the authors to be read, but he gives his judgment of the peculiar merit of each, and a sound criticism and analysis of every volume to be studied.

Experience is said to have proved decisively the utility of this instruction. If on this system much is to be done, we must take time to do it.

“The great error in our plan of education is, that we are too much in a hurry, that our young men are ushered into the world, and commence the practice of their professions at a period so early, and after a preparation so slight, that very few have acquired the prudence or the knowledge requisite to govern their conduct in either.

“Hence arise the errors and failure of too many, and our general, and I am afraid I may say, too just, reputation for superficial attainments. Could we keep our youth at school till sixteen at least, at college till twenty, and in a counting house or at the study of the professions till twenty-four or twenty-five years of age, they would be more generally successful in life ; we should have fewer failures in trade, and more respectability and eminence in our professional men.”

Our medical students are frequently licensed to practise after three years of study ; but I am persuaded that no physician of learning and experience, has ever thought this a sufficient period of preparation, nor ever admitted it to be such, except from a sort of necessity, arising from the circumstances of a thin population and a new country. But whether we are not already too far advanced in population, in wealth, and in civilization, any longer to tolerate this defect in our plans of medical instruction, I would respectfully submit to our legislators and the medical public, as well entitled to their fullest deliberation.

An excellent provision exists in the state of New York, requiring four years of pupilage before an ordinary license to practise can be obtained.

In England, till lately, the student of medicine or surgery served an apprenticeship of seven

years to learn his art ; but this period is too long, and was often so passed as to afford incomparably less advantage than four years properly employed. In the university of Padua, in Italy, ninety-four courses of lectures are given in medicine, surgery, and pharmacy, and five years are devoted to a medical education. In Pavia also five years are consecrated to medicine.

Our art has been injured by an unnatural division of it into two parts, medicine and surgery, as if these two branches could be separately learnt and practised. Anciently, it was not so. For ages Hippocrates, Galen, Celsus, and others, cultivated the entire field of medicine as a whole. It was not till the year 1163, when, in Christian Europe, the practice of medicine was engrossed by the Jews and ecclesiastics, that the council of Tours prohibited the clergy from performing any operation of blood. And that church, which had united its influence with the arm of secular power, in order to degrade and limit, that they might control, the human *mind*, from this time became too sensitive and tender, to permit the shedding of human blood, even for the sacred purpose of curing disease and prolonging life.

Surgery, now driven from the seats of learning, fell into the hands of the laity, who were nearly all illiterate, and thus became barbarous in the hands of the ignorant and crafty.

The education of the physician and surgeon should be the same, excepting that the former need not perform the higher operations in surgery, nor be practically acquainted with the subsequent treatment and effects. But he should know when his patient requires the aid of surgery.

In practice, all physicians, except those in populous places, find it necessary to do the more frequent and ordinary operations of surgery. Every physician should bleed his own patients, or be present when they are bled, or employ a physician to do it for him. For before a vein is opened, and the effects of the operation are seen, who can determine how much blood, in any case, should be taken away? Mere bleeders should not be tolerated, for he who knows nothing more than how to open and close a blood vessel, can never be safely trusted to do this. Even in this day of light and advancement, I could name a surgeon, preeminent for the despatch and cleverness with which he removes a stone from the bladder, and performs every other act of operative surgery, but who is reproached, by a number of competent judges, with sometimes losing a patient, from the want of the proper subsequent treatment.

Mr. Abernethy found that many wounds which resisted all the means that the surgeon could em-

ploy, were attended with a disordered state of the digestive organs, and yielded readily when the due performance of the functions of these organs was restored; nay, that many wounds and other local diseases had no other origin than the states of health which attend irritation of the stomach and bowels.

I have never known a surgeon, capable of practising medicine, who has not been called on to prescribe ten times as a physician, for one operation in surgery.

In new countries, and in certain thinly peopled portions of every country, the same place can support but one practitioner, and he must be physician, surgeon, accoucheur, dentist, and apothecary. In populous cities indeed there are advantages which arise from a division of labour, and he may very properly confine himself to any one branch of his profession, who finds sufficient employment in it. In this way too, individuals may often become more accurate and successful, and better satisfied with themselves than they would otherwise be, and the public are better served.

In reference to this division of the healing art, some late authors have used the term *surgical diseases*, and the inaccuracy of this language should be exposed, that the language itself may be discarded.

A disease may with equal propriety be called *medical* as surgical; surgery being merely a branch of therapeutics. Medicine and surgery, in their application, both equally refer to the means of curing diseases, and not at all to the causes or nature of any particular class of morbid affections.

Blistering, venesection, and the application of leeches, may all, I suppose, be regarded as surgical remedies, and yet, from the use of these remedies, who could divine the character of the disease for whose cure they might be directed?

From the day the student begins to read anatomy, he should begin to see plates, preparations, and subjects. From the day he begins to study pathology, he should begin to inspect patients. From the day he begins to investigate the treatment of diseases, he should witness the operations of remedies, and so of other particulars.

Thus the testimony of the senses will come in aid of the understanding.

Thus books and patients will reciprocally render each other more intelligible, interesting, and instructive; and thus the difficulties and intricacies of the science will be the sooner perceived and surmounted. Thus the art of discovering and interpreting the phenomena of diseases will be acquired, and the evidence of curative power detected.

Thus the pupil will, in the shortest and best manner, become prepared to understand the fallacies, and to measure the shallowness of any future visionary and theorist, who shall presume to inform us, that all diseases, and that all remedies, are to be divided into two classes each; each class of the same character, and differing only in degree!

From the day the student becomes practitioner, he should, as opportunities permit, begin to educate himself anew; he should review and scrutinize all that he has received from his books and instructors as well founded, for he has taken much on trust.

He must prove and retain what is true, and reject what is false or useless.

He must do all this by reading, observing, experimenting, and recording.

In his reading, he must recollect that the head, like the stomach, is benefited only by what it can relish, digest, and appropriate.

He must read every day, but not too much in any day. He must read nothing which is not worth his undivided and concentrated attention, and then he will read with interest and effect. By observation, I mean the habit of attending to every thing we do, and to all that we see.

By keeping records, I refer to the good effects of putting on paper, not only those important

cases and rare occurrences, which occasionally happen, but also those more numerous and common events, and insulated facts, which, when preserved and arranged, are in their amount of great value, but which, without being recorded, are apt to escape us, till irrecoverably lost.

From the want of this practice, I have sometimes sustained a loss which may be common to others.

In some difficult case, some cutaneous disease, for example, after trying the usual remedies without success, I have fortunately hit on some extemporaneous prescription, which has done all I could wish. In six months after, I have been desired to give the same prescription, but no copy of it has been kept, the recipe in the meantime is lost, and with it the recollection of its contents; and this loss cannot always be supplied by any future effort.

There is an agent in society, standing as a medium of communication between the physician and his patient, whose occupation is too important to be any longer trusted to unskilful hands; I mean the apothecary—whose duty it is to prepare, issue, and occasionally to administer medicines agreeably to the physician's prescriptions. What should be the qualifications of an individual who wishes to become an apothecary? He should in the first place, possess a knowledge of the English and Latin languages; then of the

materia medica and pharmacy, including chemistry, and a competent acquaintance with botany, mineralogy, and zoology. The disastrous consequences of permitting unqualified persons to compound and sell medicines, must be too obvious to need any further notice.

No one among us who has been disposed to assume the office of an apothecary, has yet been restrained, by any law of the state, from exercising its functions.

But this is not all, the catalogue of evils is not yet fully unfolded.

The mere druggist has been allowed to intrench on the province of the physician.

The spectacle is at once ludicrous and deplorable to witness what is daily practised in many of our apothecaries' shops. A man comes in, and addressing himself to one of the establishment, says, Doctor, I'm sick, or my child has a certain complaint, and I wish you to give me something to cure it.

The *opifer per orbem*,* willing to act in conformity to the profession and title thus gratuitously conferred, and too prompt in his zeal to serve his customer, to admit of any scruples or delay in a choice of means, immediately puts up the de-

* *Inventum medicina meum est ; opiferque per orbem
Dicor, et herbarum subjecta potentia nobis.*

OVID. *Met.*

sired remedy; and here the matter between the buyer and seller commonly ends; but not always so satisfactorily between the patient and the remedy. But of consequences we are not often informed, for if the child is injured or deprived of life, the parent, on reflection, is likely to find the fault to be quite as much his own, as his doctor's, and instead of honestly admonishing his neighbour to avoid the error into which he had fallen, keeps his own secret, and thus permits the mischief to go on.

Supposing a physician to be well educated, how is he to become reputable and useful in his profession? In the first place, by consecrating his time and talents to the sick. All other business and amusements must give place to a steady and undeviating discharge of his professional duties.

In his intercourse with the sick, he should be patient, gentle, kind, and attentive, making all due allowance for the weakness and imperfections of poor human nature, especially when oppressed by disease, and tormented by increased sensibility and morbid irritation.

But as all human obligations are mutual, the physician is entitled to receive from his patients a compliance with his directions and efforts to serve them.

Whenever therefore from obstinacy, prejudice, obedience to the officious interference of

friends, the opposing efforts of obtrusive meddlers, or any other cause, the patient by his misconduct, puts it out of the power of his medical attendant to serve him, the physician should withdraw. For by continuing his visits merely for the sake of charging them, he would degrade and injure both himself and his profession.

In the moral government of the world, suffering seems to be the natural consequence, and the appropriate corrective of misconduct; and in human society I think we cannot do better than to follow this course, so far as to let him suffer, who rejects the assistance he needs, till he is willing to accept it.

If it be thus the duty of the physician to bring to the alleviation of human ills, and the preservation of life, the best affections of the heart, with all the stores and endowments of the mind, what should our feelings and our conduct be towards him who perverts his knowledge to its destruction, and what is worse—to the destruction of moral purity? Believe you, gentlemen, that such monsters exist, and in the midst of us? It is for the profession to hold no voluntary intercourse with beings thus horrible and corrupt. It is for society to avoid them as they would the stroke of annihilation. It is for the ministers of justice to ferret these wretches from their dark places of cold blooded, deliberate, systematic murder, and

for the laws to inflict on them an adequate and salutary punishment.

A decided feeling of disapprobation has lately been raised against our profession, in consequence of another offence, committed by a few of our number, and which ought not to escape notice on this occasion; I refer to an abuse of the privilege of dissecting dead bodies. A large and enlightened portion of the public are fully aware of the importance and necessity of a knowledge of the structure of the human fabric, to the physician and surgeon, and are entirely disposed to favour the profession in the exercise of this means of instruction, so long as it is confined to the legitimate objects of science, and so far as the laws of decorum are observed, and the feelings of humanity strictly respected.

If such is the admission and the support of the public sentiment, such the views and opinions of the profession generally, it seems almost incredible that any part of its members should be found to differ so widely from the rest, as to regard the violation of the sanctuary of deceased friends as a matter to be viewed with indifference and contempt. Is it possible in an orderly community, that any medical practitioner should be found to engage in a traffic of dead bodies? Will it be credited that numbers of dead bodies should be obtained for no other purpose than to strip off the flesh in order to make sale of the bones to

the highest bidder? Is it credible that men of the profession can have so wholly forgotten what is due to themselves and their brother practitioners, among whom they live, and whose safety they are bound to regard, as to engage to supply subjects for dissection, to persons at a distance, whenever they are called for?

To these questions, the public voice has answered loudly in the affirmative.

An odium has thus been brought on the whole profession, and serious consequences have been threatened.

It becomes us then, as a Medical Community, to express our disgust and abhorrence of this practice, and to use every means in our power to suppress it, and if this cannot be done, to do ourselves the justice at least of separating the guilty individuals, whoever they may be, from the body they are willing to dishonour.

Let those in fault feel persuaded that we are not ready to justify their proceedings, nor to share their responsibility.

No sufficient excuse for these excesses can be derived from a love of science, none from a love of gain, and least of all from a willingness to permit the odium of these transactions to fall on other individuals, and other institutions. The custom of human dissections should be limited to those who are imperiously called on to practise them, and by these it should be done under such

precautions, that no friend or relative should ever experience the distress of knowing that the body of one, in whom he was interested, had been removed from its silent, and may we for the future add, its *sacred* abode.

But I turn with relief to a consideration of professional intercourse.

To every feeling and reflective mind, the business of the physician is a grave vocation, for not only health and sickness are concerned, but life and death are involved in its exercise. Such are its cares, its solicitude, and its labours, that every individual, more or less, needs the aid and sympathy of his brethren.

The aid he seeks, however, to fulfil his wishes, must come from a friend, or from a professional brother in whose honour, integrity, and skill he fully confides.

Here there is no jealousy, no fear of loss or injury; the medical attendant feels safe both for himself and his patient.

Here is an unreserved interchange of minds, and a union of efforts for the mitigation of suffering and the cure of disease.

Where the resources of our art fail us, the consciousness of this faithful and assiduous application of all its powers, affords the best and only earthly consolation, which the situation of the physician so often and so much requires.

To render this intercourse what every one would like to receive from others, codes of regulations have been framed, enacted, and subscribed ; and these have doubtless had their use, where higher motives have been wanting, in restraining some from violating the laws of honour, and trespassing on the rights of others.

But these statutes, however numerous, will never fully succeed without that better law, written on the heart, which prompts us to treat others as we like to be treated ; and with this, the statute book would be superfluous.

After ignorance and knavery, nothing is so fatal to the tranquillity and reputation of individuals, or to the general success and character of the profession, as a want of liberality and good offices among its members.

Duty and interest are perfectly coincident, for the most part in this world, but always and exactly so, if we take into view the whole of existence ; this is implied in the notion of a perfect government.

Thus they, who have been so unwise as to regard their own supposed interest only, at the expense of others, will at last find, that he who has given up all temporary advantages rather than counteract his moral sense, or the relations of life, has infinitely better provided for himself than he who has obeyed the impulse of a blind and unprincipled self-love.

Some men of our profession, deeming fame and wealth the only objects worth their pursuit, have endeavoured to find some easier and more expeditious way than this to accomplish their ends. But the termination of the experiment has always proved the validity and wisdom of the good old axiom, that honesty is the best policy. This expedient demonstrates too the entire unsuitableness of all indirect and oblique measures for the accomplishment of any fair purpose, and frequently their impotency even in aid of a bad one.

Further, this management involves the uncomfortable necessity of substituting appearances for reality, and pretension for sincerity. "Now the best way for a man to seem to be any thing, is really to be what he would seem to be. Besides, it is often as troublesome to support the pretence of a good quality as to have it, and if a man has it not, it is most likely he will be discovered to want it, and then all his labour to seem to have it is lost."

The profession of medicine has been charged with being infidel and unchristian; but this, as a general accusation, might be refuted by an appeal to the lives of many individuals who have exhibited every virtue, that is becoming and excellent in the human character.

In every just government, power and responsibility are equal, and as we have no controlling influence over each others' motives and actions,

so no individual is any further responsible for the general reputation of the profession, than as he makes it worse by his example, or fails to make it better, by all the means in his power. But without stopping precisely to adjust the proportions of truth and falsehood contained in reproaches like these, every good physician will be desirous to disprove, by his conduct, the odious maxim, *medicus non christianus*. The standard of professional respectability is unquestionably susceptible of elevation, both in morals, literature, and science; but in the meantime it is right that every individual should stand, as ultimately he must stand, or fall, on his own merit or demerit. Is there any thing in the study or practice of medicine, as has been said, which leads to infidelity? So far from this, anatomy itself, the first thing we learn, demonstrates the existence of a power altogether superhuman. Does any man know what life is, can any one understand the wonderful phenomena ascribed to sympathy, or the impenetrable mystery of generation?

Does any physician comprehend the mode by which remedies produce their effects?

All these secrets, and numberless more, God has reserved to himself.

What is so inconsistent as for a well educated physician, not to refer to the will and agency of a First and Infinite Cause, all those results and

effects which he continually meets, and for which he can no otherwise account?

This is natural, and has been the feeling and practice of the greatest and best men of our order.

Since our last meeting, two of our associates have terminated their connexion with this society, and the period of human existence. These were men of whom we cannot speak, but with esteem and respect.

They were distinguished by a love of knowledge, by moral worth, active benevolence, and a faithful discharge of their professional and social duties.

They were worthy of the profession they had chosen, and were useful and reputable members of the community in which they lived, and which they served, and by whom their loss is with reason lamented.*

To conclude. "Is it possible that greater inducements can be offered to a young man, to stimulate his most strenuous exertions, and to call forth all the force of his understanding, and every generous feeling of his heart, than are to be found in the nature, the extent, and the influence of our profession?"

"Occupied on the most important subjects, the ease, the comfort, the happiness, and the lives of

* Dr. ABIJAH RICHARDSON, of Medway, and Dr. JONATHAN OSGOOD, of Gardner. The latter gentleman was also a clergyman.

his fellow-creatures, it imperiously calls for knowledge and ability. Extensive, beyond the limits of any other science, in the variety of its objects, the continually varying nature of its subjects, and the endless, progressive march of its improvements, it is impossible either to acquire what is now known, or to keep pace with its daily accessions of knowledge, but by a zeal and industry as steady and persevering as time itself.

“Extended over the face of the whole earth, and at the same time penetrating into the recesses of every private family, unless our knowledge be accompanied by prudence, virtue, and religion, we may do more harm by our example, than we can do good by our skill.

“May then every student and practitioner of medicine lay these important truths seriously to heart; that each may study and practise his profession, not only from motives of ambition and interest, but with a view to the better fulfilment of his moral and religious duties.

“That he will conscientiously consider the responsibility of his station, and the influence of his example, and that while he faithfully and respectably fulfils his duty to his patients, by his talents, learning, and industry,—he will support the dignity of his own character, by the correctness of his conduct, and recommend his example, by the purity of his manners: and may peace, reputation, and fortune, be his well-earned reward.”

